AMENDMENTS TO THE ABSTRACT

Please replace the abstract as originally filed with the following:

-- A concurrent incremental garbage collector where tracking and summarization of modified references is concurrent with application operations. A card table is arranged with write barriers so that an application's modification of objects in memory cards are memorialized in the card table. The collector performs an atomic operation, e.g., a compare-and-swap (CAS), on the card table to detect modified or written to objects. Card table indicators of dirtied cards are reset or emptied and the corresponding dirtied cards are scanned for the modifications and the remembered sets updated. Another CAS is performed on the same card table and if any dirtied cards are indicated the collector preserves the card table with the dirtied indicators and operates on a distant card table. If the CAS succeeds no modifications were made and the collector operates on the next scheduled card table group. --